2: Murra E-4 (no date) 1943 SD6 Cayapa SD6



as that of the plantain. Almost every family owns its cane mill and distillery, which are supplied by the omnipresent canefields. 273

With all this emphasis on agriculture, the *Cayapa* are, nevertheless, a jungle people, skilled hunters of many species of rodents, deer, felines, peccaries, armadillos, and birds. Life at the riverside encourages and is encouraged by dependence on fish, crustaceans, shellfish, and crocodile eggs. Under aboriginal conditions the *Cayapa* were probably never hungry. 249 246 262

Hogs and chickens are now kept everywhere. Dogs are also conspicuously reported. 231

Food is mostly boiled, though frequently meat will be broiled or baked. Surpluses are dried and smoked. 252 251

### HOUSES AND VILLAGES

Though maps traditionally locate *Cayapa* "villages," there are nothing but agglomerations of three or four houses and a church. The houses stand empty most of the year and are used only at holidays when the priests visit the *Cayapa*. 361 [347]

The actual habitations of the people are spread through the jungle always at riversides (pl. 37, *top*) and usually isolated from one another by fields or even uncleared stretches. The houses stand on high poles 6 to 12 feet off the ground and are reached by removable ladders. The roof is thatched with palm leaves (pl. 37, *center*), and the rectangular house is virtually unenclosed. Sometimes the house floor is separated into two parts, one for cooking, the other for sleeping and eating. One chief had a large house (pl. 37, *bottom*) which could seat 40 people and which had more than two "rooms." The furniture is scanty: hammocks are used for sitting and sleeping, and wooden seats are sometimes found. An attempt by Barrett to correlate these seats with the famous stone seats of Manabi (Handbook, vol. 2, p. 780) seems very inconclusive. 361 342 [347] [348] 352 171

In addition to permanent houses, small temporary ranchos are sometimes built when people are far from home. The houses in the "village" are standard structures, but the church follows Spanish ways: it rests on the ground and has walls. 343 346

### CLOTHING AND ORNAMENTS

Although *Cayapa* tradition records a period when the people wore blankets and even ponchos, today their clothes are scanty (pl. 39, *bottom*). The men wear a tight, small, white garment, made like bathing trunks, and a thin gaudy shirt of calico, with short and very tight sleeves. On festive occasions vests of European cut and manufacture are frequently donned over the shirt, and so are felt fedoras. 241 252

Women wear a long skirt of native cloth, girded with a narrow fringed belt. As in the Highlands, several skirts of different weights are sometimes worn. Head, shoulders, and chest are usually left bare. 241

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In pl. xi is shown the ground-plan of one of the largest of the Cayapa houses. This is the largest of the four dwellings of the chief of the Punta Venado division, and is commonly called "*la casa grande del Gobernador*." This structure is situated on the southwestern bank of the Rio Cayapas, at a point just up-stream from the confluence of the Herradura Grande. The house is occupied usually by at least two families, and can comfortably accomodate as many as forty people if necessary. The structural details of this dwelling are typical of those of Cayapa houses in general, although the others are somewhat smaller. This "casa grande" is 87 feet in extreme length by 41 feet in extreme width. The floor may be divided into two areas by the line *h-i*, which represents that along which the two inner gables meet and where the pambil eaves-trough is placed to prevent the water from running in on the floor. The larger floor area (*a*) is the general living and sleeping room, and is 50 by 35 feet, exclusive of the raised projections (*e*), which extend from six to seven feet in each case. This entire floor area is covered by a single large roof. The smaller area (*b*), about 30 feet square, is, as before stated, at the same level as the larger area, but it is covered by a separate roof, and it is here that the fire-box is situated and where all food is prepared and cooked. The fire-box (*c*) is 6 feet 4 inches by 3 feet 9 inches, and is raised about three feet from the floor. The projection (*d*), about 5 feet 6 inches wide and 19 feet 6 inches long, is at the same level as the main floor, but is made of bamboo. Here

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252 are kept the water calabashes, and the preparation of
352 food is usually done on or near this space. All houses are provided with a similar place for the storage of the calabashes, although in most cases the space devoted
352 to this purpose is much smaller. Unlike *d*, the several projections marked *e* on the plan are raised from four to twelve inches above the level of the floor. They are from 6 to 7 feet in width, and beginning at the lower left-hand corner of the plan, measure 12½, 8½, 15, 13, 11, and 9 feet, respectively, in length. These serve as storage places and are frequently used at night as
342 places upon which to sleep. The inner edge of each of the areas *d* and *e* is, of course, supported upon the stringers of the main floor, but the outer edge in each case is held by two special posts which rest upon the ground and reach to the roof, which naturally must project beyond the main roof in order to cover the corresponding floor projection. These posts are indicated in the ground-plan by small rectangles, and are usually somewhat smaller than those employed to support the main floor. As shown on the plan, fourteen posts are used to support the main floor, the successive posts along each side being placed from eleven to twelve feet apart. The dimensions of these posts in cross-section are usually about six by nine inches. Access to this house is by means of two ladders (*g*), both of the type shown in fig. 1, *a*. In the case of one of them a special projection (*f*), 3 feet 3 inches by 5 feet 6 inches, has been built as a landing at the top of the ladder.

In pl. XIII is shown an elevation of the same house.

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to the river to lay their eggs. The large eggs of the alligator are also much in favor, and it is said by some that alligator flesh is edible. The eggs and flesh of another and slightly different species of amphibian, called tulicio in the local Spanish, are likewise used for food. In addition to these foods there are certain insects which, either full-grown or in the larval state, are much esteemed.

Various methods are employed in the preparation of these foods. The plantain, the most important food product of the Cayapa, is prepared in a variety of ways. It is almost invariably gathered while green, and is regularly eaten in that condition, though ripe plantain is frequently used for making a kind of gruel, and occasionally it is roasted. The usual method of preparing the green plantains is by boiling, the outer covering of the fruit having first been removed. They are thus cooked for from a half to three-quarters of an hour in a pottery vessel, or nowadays more frequently in an iron or a granite-iron kettle, closely covered with a green leaf called ū′tya hakī, which is very tough and is used in many ways in the preparation of food. It is impossible to cook green plantain so that it is tender, hence the usual mode of preparing it is to beat the hard, cooked fruit with a stone muller upon a mealing stone (pl. LXII, 1, 2), mixing and kneading it meanwhile with the hand. Usually this beaten plantain, which is called bala, is eaten without seasoning, although a little salt may be added; or it may be mixed with dried meat during the pounding. The boiled green plantain is also frequently eaten without

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pounding. The ripe plantain, on the other hand, is generally prepared, after boiling, by macerating with a wooden masher, matcō'ka, in a wooden bowl, called batea in Spanish. In pls. LXI, LXII these implements are shown, the masher appearing in pl. LXI, 1–5, and the batea in pl. LXII, 4. In this form the plantain will keep for three or four days, and is a nourishing, concentrated food. It is, however, never eaten in this form, but is diluted with water into a very thin gruel, which is drunk more as a refreshment between meals than as a regular food. The plantain mash is also carried on short trips into the mountains or along the river, and is made into gruel as needed.

Both green and ripe plantains are also roasted over coals, the ripe ones generally with the outer covering, the green ones usually without it. When thus cooked also, the green plantain is preferred to the ripe. It is ordinarily roasted until quite dry, when it is mashed on the mealing stone with the muller. The pounding in this case is not the same as in making bala—the plantain is merely mashed flat, without any mixing with the hand.

Still another method of preparing green plantain, but one that is not applicable to the ripe fruit, is the making of a kind of tamales. With a small shell the plantain is scraped to a mushy consistency, and, after the addition always of a little salt and sometimes of pounded meat, fish, or certain species of insects, is rolled into a long, slender cylinder, covered with the tough green leaf, ū'tya hakī, before referred to. This preparation is then roasted before the fire for some

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minutes, usually until the leaf covering is largely, if not entirely black. The covering is then removed and the tamale eaten in that form or after being mashed flat upon the mealing stone. When obtainable, a species of large black beetle (*Rhymchophorus palmarum*), called kū′perū, is used as one of the ingredients in the making of these tamales, and it is said by the Indians to be one of the most toothsome of all their foods.

The method usually employed in preparing other vegetal foods, such as yuca, sweet potatoes, etc., is by boiling in the ordinary manner. Meats and fish are generally boiled in pottery vessels without the covering of leaves above mentioned, and they may also be broiled or baked. Broiling is done in the ordinary manner, by simply placing the food over the fire. In baking, however, a special method is employed. After being properly prepared and cut into small pieces, the meat is wrapped in two thicknesses of the tough green leaf above mentioned. The flat package thus formed is then placed upon the coals, and hot ashes and coals are heaped upon it. Several minutes are usually needed for this baking, and sometimes it is necessary to replenish the coals or to turn the package over to insure proper cooking. This method is much employed in cooking all kinds of meats, fish, shellfish, and crabs and other Crustacea.

In this warm, humid climate, where meat keeps but a very short time, drying and smoking over the fire is much employed by the Cayapa when any considerable quantity of meat or fish is on hand. For this purpose

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251 special racks are built above the fire-box, where strips of
352 meat, or, if the animals or birds are small, the entire bodies, are placed to dry and smoke. Sometimes there are as many as three of these racks, one above another, each covering the same amount of space as the fire-box
251 itself. Considerable time is necessary for drying meat in this way, and, when once dried, it must be kept either on the racks or near the fire in order to prevent molding. For drying fish there usually is employed the upper half of a large earthenware jar, which is turned down over the fire and the fish laid across the opening upon green sticks. Being thus close to the fire, a shorter time is sufficient to dry and smoke the fish, but when thus cured they also must be kept on the racks above or elsewhere near the fire-box in order to keep them from
[278] molding. A few vegetal products, especially medicinal herbs, are dried in a similar manner, as likewise are two vegetal foods. The inner covering of the tagua or ivory
[262] nut, which, when dried and then roasted upon the coals, has an excellent flavor, is used as food to a slight extent. Green plantain is cut crosswise into thin sections and dried thoroughly in the sun, when possible, or over the
[853] fire when necessary. It is then ground to powder and mixed with water into a thin gruel, which is used as food for babies when the mother is ill or for other reasons is unable to provide a proper supply of milk.

252 Boiling is employed also in the preparation of certain vegetal foods in cane juice. While practically all the product of the cane-field is used in making rum, some syrup and sweets are occasionally prepared. Yuca and

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MEALING BLOCK AND STONES, AND WOODEN TRAYS

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plantain or other fruits are cut into fairly small pieces and boiled in the cane juice during the process of reducing it to syrup, thus producing a rich and toothsome conserve. Much labor is entailed in making this delicacy, but it is rarely prepared except as a secondary product of distillation. 252

A rather rare food, and one much prized by the Cayapa, is a large white, brown-headed grub, called kō′mucū, which is found in rotten trunks and stumps of fallen palms. Their presence is easily detected by their low, crunching sound as they eat the tough palm fibers within. Such a log is cut open and the grubs are carefully taken out, along with a considerable quantity of the rotted palm-wood. They are usually placed in burden-baskets and then stored in the house in a closely-covered olla until needed. The grubs have a very tough skin, and contain a considerable quantity of rich fat, resembling lard, which is used by the Indians in several ways. The kō′mucū may be eaten raw, but more frequently it is broken open, placed over the fire in a small pottery vessel, and fried in its own fat, so to speak, resulting in a very rich oily food. Another favorite method of preparing this food is to mash and make into a gruel some boiled ripe plantain, which is stirred into a pot of kō′mucū that has been made to boil with a small quantity of water. Most of the kō′mucū used in making this dish are left whole, but a sufficient number of them are broken to liberate a considerable quantity of fat into the receptacle. The result of this process is a rich food of the consistency of gruel, and it is relished, perhaps, above all others. 262 252

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226 The Cayapa make frequent journeys to the ocean, chiefly for the purpose of securing shellfish and crabs, which are abundant along the beaches about the mouth of the river. There are several species of clams and mussels, as well as oysters in large numbers. Also crabs of several species are very abundant, and are captured usually by digging out their burrows. Both the shellfish and the crabs are brought alive up the river, the crabs being confined in coarse baskets. Oysters are usually heated over coals sufficiently to cause the shells to open, and are eaten directly from the shells with a bit of salt or lemon; but clams and mussels are generally boiled. Crabs also are almost always boiled, although sometimes they are roasted.

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[263]

226 Inland, along the banks of the Rio Cayapas and its tributaries, are obtained three other foods of the same class. In the wet soil of the jungle live large numbers of a small, bright-red land crab, called nē′lū, or, more specifically, kaia′pa nēlū. This crab has one very large arm, which is the only part used as a food. The crabs are caught in great numbers, and the large arm is removed and roasted. In the waters of these streams are also large numbers of a small species of lobster or crayfish, called pī′cū, which is considered an excellent food. It is caught with a special dip-net, called cīa, used almost exclusively for this purpose. The third food of this class is likewise obtained from the rivers. It is a very small bivalve, resembling a miniature mussel such as is found in the ocean, and is gathered at certain points along the streams where the rock walls of the banks or where bedrock affords convenient lodgment.

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very little attention until time to gather the fruit, which in this region is of excellent flavor, especially when allowed to ripen thoroughly on the plant.

The fleshy roots of the yuca (Cayapa, kū''tcū) are considerably used as food. The yuca is started by means of cuttings, and requires from seven to nine months to produce the edible roots. These roots are usually boiled in the regular manner when used as an ordinary food, but, as above mentioned, they are also frequently boiled in sugar-cane syrup to make a kind of preserves. The yuca is a very nutritious food, has an excellent flavor, and by many is much preferred to either potatoes or yams. It is never baked.

Potatoes (Cayapa, pū'lyū) do not thrive at this low altitude, owing to the heat and humidity, although they grow well in the valleys of the higher Andes. On rare occasions they are obtained from the Indians of these interior valleys who make journeys to the coast for trading and other purposes. They have also been procured in more recent years from the traders about the mouth of the river, but the Cayapa seldom purchase commodities of this class.

Another food of a similar kind which is grown by the Cayapa to a limited extent is the red yam. It is started by cuttings in the ordinary manner. In preparing them for food, the yams are boiled, but are never roasted, as is so frequently done by aboriginal peoples.

Of this class also is the root-stalk of the rascadera (Cayapa, *t*ū'a), a species of caladium which is grown to a limited extent by a few of the Cayapa. This is also pre-

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pared exclusively by boiling. Rascadera and yuca are grown to a much greater extent by the negroes who live along the river than by the Indians.

According to their own tradition, the Cayapa, having been formerly a mountain people, in earlier times subsisted largely on maize or Indian corn (Cayapa, pī'cū), which is still one of the principal foods of practically all the Indians of the higher Andes. On moving to the lower altitudes, the Cayapa brought the maize with them, and even yet a small quantity is grown by them. The plant itself it comparatively small, and the ears are very small, rarely exceeding six or seven inches in length. When gathered for food it is almost always taken green and is prepared in one of three ways. Frequently, the husk having been removed, the ear of green corn is simply roasted over coals, when it is considered quite a delicacy, though it lacks the rich flavor of our sweet corn. The products of the other two methods of preparing it are gruels. The first stages in making both kinds are the same, and the process is as follows: The necessary number of husked ears of green corn having been procured, the women chew the kernels from the cobs, depositing them in a large wooden tray, or batea. Since the introduction of various articles of commerce some households use a large tin grater for removing the kernels from the cobs. The kernels are then placed, handful after handful as needed, upon a mealing stone (pl. LXII, 1, 2) and ground with a stone muller such as the one shown resting on the mealing stone shown in fig. 2 of the plate mentioned, a small amount of water being added from

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time to time. This thick paste is then placed in a cooking-pot or kettle with the requisite amount of water and boiled, the consistency of the gruel of course depending upon the amount of water added. The thick gruel is eaten with the fingers, or frequently nowadays with a spoon, and is eaten as ordinary food. The thin gruel, which is more frequently made and which usually is sufficiently liquid to be called a beverage rather than a mush, is drunk from small hemispherical calabashes. It is flavored with a little salt, or preferably with sugar. This food is called champo (tcambō'se in Cayapa) and is used almost exclusively at feasts, where it is served in canoe-shape wooden vessels, called tcambō's kūle, made especially for the purpose. These utensils are from two and a half to three and half feet long, their ends are made like the prow and stern of a regular canoe, and they are elaborately ornamented with the same painted designs as are used on large canoes. These little vessels may be set upon the feast table, but often they are carried about among the feasters, in which event one of the masters of ceremony takes the prow and another the stern and pass throughout the house, being careful that everyone is served. On the surface of the beverage float from two to four or five small calabash dippers, or mates, with which the champo is drunk.

A sufficient amount of maize to provide seed for the succeeding year is allowed to ripen on the stalk each season. The ears are gathered, the outer husks bent back, and tied together in bunches of a dozen or more

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243 ears each. These bunches are then hung from the roof to prevent attacks by rodents. Whenever possible the corn is hung where the heat from the fire will keep it from molding.

177 241 262 The foregoing are the chief agricultural food products of the Cayapa. Excepting the maize and the potato, all were introduced since the Spanish conquest and are now systematically cultivated. In this connection should be mentioned certain palms which provide food of one kind or other, and which, while they cannot be strictly classed under the head of agriculture, since they are not planted and tended as are the other plants mentioned, are of considerable economic importance.

222 One of these palms is that commonly known by the Spanish name chonta dura and called kanō′tcī by the Cayapa. One variety of this produces a cluster of red fruits, another a cluster of yellow fruits. The Cayapa [262] name for the fruit of this palm is ka′imbī. Both ripen in the late summer months and are much esteemed as food. [413] By means of a long hooked bamboo pole, these clusters are torn from just below the crown of the palm, which is 252 usually quite tall. The fruits are boiled in a cooking-pot or kettle; the tough skin is then easily peeled off, leaving the yellowish mealy meat ready to eat. In the center of this, in turn, is a very hard nut which, when cracked, yields a toothsome white meat with a flavor resembling that of ripe coconut. The mealy yellow meat is usually eaten with a little salt, but is especially good when eaten with a thick syrup made from cane juice. It is also frequently boiled in this syrup, the result being a kind of conserved fruit.

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262 either be scooped out with the fingers or sipped. The nut is not used as a regular article of food, but more as a confection, its use being much restricted by the supply and the difficulty of opening the bur.

252 Another food derived from the tagua is the yellow, 262 mealy and comparatively thin covering, called pīm būkū, or ya ū'kū, which surrounds the ripe nut itself. This is peeled off and roasted over coals, if it is to be used immediately, or dried on the smoking rack above the fire if to be used later. The flavor of this roasted meat is similar to that of crisp, baked, fresh pork-rind. It is also frequently eaten raw, but in this state it has a rather unpleasant flavor, similar to that of raw acorns.

ooo The gathering, curing, and use of the tagua leaf, which is almost exclusively employed in thatching houses, are described in the discussion of building construction.

222 A very good food is obtained from the palma real, [262] called ūya'-tcī. This is a very large species and in form is perhaps the most beautiful of all the palms. Its very straight trunk, which sometimes reaches a height of seventy-five to a hundred feet, swells considerably at a point about midway of its height and resembles an entasic column surmounted by a huge umbrella-shape crown of leaves which wave gently in the breeze. In a large specimen of this species the trunk is from three to four feet in diameter at its base, swelling uniformly to a diameter perhaps one-third greater at the middle, and again decreasing toward the crown to a diameter somewhat less than that of the base. The mature leaves reach a length as great as twenty feet.

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of small ridges may now serve, however, it seems to have had its origin in a desire to ornament the stirrers, since most of them are plain at that point (as is the one shown in fig. 7), and because various stirrers of this form have carvings at that point which are similar though much smaller and are obviously purely ornamental.

A second form of stirring implement is the food paddle, called kūwi'ñgī, two specimens of which are shown in pl. LXI, 8, 9. These are used for stirring all kinds of foods while cooking, but especially ripe plantain gruel and a kind of gruel or mush made from green corn. In many cases these paddles are perfectly plain, as is the one shown in fig. 9, but now and then they are embellished with notches or incised ornaments as is the case with the one shown in fig. 8.

A utensil in common domestic use is an elliptical wooden bowl, copied after a type made by the whites and negroes of the region and bearing only the Spanish name batea. They vary more or less in their elliptical form, but a typical specimen is shown in pl. LXII, 4. They are always provided with a projection at each end to serve as handles. They are hollowed out from a single piece of wood, and range from a foot to three feet in length. Bateas serve a variety of purposes, but they are used especially for the preparation of certain foods, such as ripe plantain gruel, corn gruel or mush, and the like. They are used also as trays for washing meats or other foods, and frequently are employed in mixing and working clay during the process of pottery-making.

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pottery-making. A shallow wooden tray, like that shown in fig. 3, is sometimes, though much more rarely, made by the Cayapa for similar purposes. It also is called batea.

Somewhat similar in form to the batea is the canoe-shape dish, called tcambōs kū'le, used in serving the drink or gruel called in Spanish champo and in Cayapa tcambō'se, which is made from green corn. This is made exactly after the fashion of a canoe, with the characteristic prow and stern ends, and ordinarily with the painting along the gunwales as well as upon the prow and stern. It is usually from two and a half to three and a half feet in length, and is much wider in proportion than the river canoe, being ordinarily from ten to twelve inches in width. As mentioned in speaking of the uses of corn, the champo dish is used only at fiestas for containing champo and on rare occasions the ripe plantain gruel called ma'la.

Another wooden utensil is a heavy mealing block used especially for pounding green plantain to make the food called in Spanish bala and in Cayapa panda lō'ta. Such a mealing block, shown in pl. LXII, 1, may be compared in form and size with the average stone used for the same purpose. In fact, these blocks are much less frequently used than mealing stones, such as that shown in fig. 2. The mealing blocks are usually more or less elliptical in form and about eighteen inches in length. With such a block is always used a stone muller.

Various other implements are made of wood, but

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retain the foods which are crushed and pounded upon it. Usually at the opposite end there is no such ridge, the opening serving especially in grinding green corn.

With this mealing stone, and also with the mealing block (pl. LXII, 1), is used a muller consisting usually of a cobblestone from five to seven inches in length, three to four inches in width, and two or three inches in thickness. Sometimes such a muller is shaped artificially. A typical muller is shown in place as it is used on the mealing stone in fig. 2.

The mealing stone and muller are used primarily for making what in Spanish is called bala, boiled green plantain mashed and pounded. From one to half a dozen green plantains are put on the mealing stone, then rolled lightly and mashed with the muller, after which they are pounded with considerable force with the muller held in the right hand while the left is used between strokes to return the fragments of plantain, which have been thrown off by the force of the blows, to the center of the mealing stone. From ten to fifteen strokes of the muller result in a mass of fine-grained but soggy plantain of a light-yellow color. This resembles in texture a piece of half-baked bread-dough and is much esteemed by the Cayapa and also by the negroes. The women and girls usually prepare the bala for the men and boys, and serve it on plates, or, in the more primitive fashion, upon the cooking leaves called ũ'ĩya haki. After the men and boys have been served, the women and girls then make bala for themselves, which they eat directly from the mealing stone. After the meal, the muller is laid upon

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the floor and the stone inverted over it to keep its grinding surface away from the dogs. When again needed it is cleaned by taking a cooked plantain, grinding it upon the stone, and rolling it around thoroughly over the grinding surface. This process takes up all the fragments of plantain left from the previous grinding, and thoroughly cleanses both the mealing stone and the muller. The ridges on the two sides and one end of the mealing stone help to keep the plantain from flying off during this grinding. The lack of a ridge along the second end, however, is of advantage in grinding green corn, which process has already been described.

Now and then the mealing stone and muller are used for treating other products, such as the inner pulp of the fruit of a tree called ma'iñ-tcĭ, which is ground and mixed with balsa charcoal to make the black face-paint called ma'lyû.

The only other native stone implement is that used as a sinker on the seine and the casting net. These sinkers are simply waterworn pebbles ranging from two to four inches in length and from an inch to two inches in diameter. They are called cûpû'ka, a general term signifying stone, and appear to have no special name. In large measure these pebbles, unworked, are rolled in the leaf called û'tya haki and tied directly to the lower edge of the net; but now and then are found sinkers of such form that they are likely to become detached from the net, hence these are provided with rough notches or even surrounding grooves.

Certain smooth stones, and especially black ones, are used in treating the sick.

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286 sixty meshes. This number is kept up to the seventh course, where twenty more cords, distributed at regular intervals, are looped in. Hence in the eighth course eighty knots appear. Thus the additions proceed at these regular intervals, twenty new elements being added at every fifth course up to the sixty-second course of knots. Since this process begins at the second course, these additions are made to come on those courses whose numbers end in two and seven—two, seven, twelve, seventeen, etc. Hence, when the sixty-third course is tied there is a total of three hundred knots and meshes, and this number is maintained throughout the remainder of the one hundred and twenty-seven courses of the net. The meshes of this particular net are two centimeters square throughout its length of eight feet, seven inches. As it is cast by a fisherman it easily covers a circle ten or twelve feet in diameter.

227 286 These nets are usually made of fine pita cord in the upper part of the cone and of slightly coarser cord in the last quarter or third near its mouth. The heavier cord is apparently used in this portion of the net because of the greater wear and tear due to the struggles of the entrapped fish and because the net is weighted about its mouth with sinkers. These lead or stone sinkers often aggregate twenty-five to thirty pounds in weight and carry the net quickly to the bottom.

286 [252] The only other netted device made by the Cayapa is the hammock, which is made either of coarse pita string or of the heavy kuna-kuna string. The meshes of such a hammock are very coarse, hence comparatively few cords are required. To start with, the proper number

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greatly modified by intrusive religious ideas as have many other features of Cayapa culture. With the coming of the priest, on the occasion of his annual visit, the regular church marriage rite is performed. At this ceremony there is further chastising of the contracting parties by the chief or by some one delegated by him. 585 177

On the occasion of the annual visit of the priest to one of the Cayapa pueblos, usually in August or September, a fiesta of from one to three weeks is held, during which it is customary for couples who have been married between the time of the priest's last visit and the present occasion to celebrate a marriage feast. Should it be inconvenient to celebrate the marriage feast at this particular time, it may be held at any other gathering of the people at the village, or it may even be deferred until the next annual visit of the priest. These marriage feasts are the occasion of much merrymaking. Quantities of food, rum, and tobacco are provided, and the whole village celebrates for a day or two. During the forenoon of the first day, a table, made by spreading upon the floor of the large assembly and dance hall of the chief's house a covering of hoja blanca, is filled with all kinds of food, among them being one special dish of eggs, prepared much after the manner of scrambling. At this feast a most exceptional departure from the rule of the separation of the sexes at public gatherings is observed. At all other feasts, men and boys only are permitted to enter the room in which the feast is held, but on this occasion the bride and her godmother are present. The mother of the bride, however, does not enter. Another interesting feature of this feast is that, 585 [527] [252] 585 527

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796 A boda held from January seventh to tenth, 1909, was as follows:

At the Christmas fiesta announcement was made that two certain families would give a boda on January seventh. Meanwhile the members of these families commenced to accumulate the provisions for the feasts. Much hunting and fishing and drying of meat were done; rum was distilled; vegetal foods were procured; and, not the least in importance, a trip was made to the ocean to procure shellfish and crabs. On the afternoon of January seventh, accordingly, a considerable number of people assembled, still others coming in on the following day. No feasts or special ceremonies were held until the next day.

*First day. January eighth, 1909*

At about 9 A.M. a service was conducted in the church, followed by feasts in one of the houses of the village.

The first of these feasts was an ofrenda. While the service was being held in the church, the members of the family, assisted by friends, were placing upon the table all the food which had been prepared the night before. The table, as usual, was prepared by spreading upon a considerable area of the floor a covering of the large leaves of hoja blanca, and upon these were placed all manner of eatables. Liquids or semi-liquids were contained in pottery or calabash dishes, and dry foods were placed directly upon the leaves. There were many of 796 the various mammals, birds, and fishes of the region • 252 dried and smoked until almost jet black; monkeys, 262 guatins, squirrels, zorras, woodrats, and other mammals

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dried whole; and guantas, deer, jaguars, pumas, armadillos, sloths, and wild hogs, all in dismembered parts. Among the birds were parrots, toucans, doves, grouse, wild turkeys, herons, and egrets, all dried whole. Dried fish of various species, especially the shad, were present. In vegetal foods also there was great variety, as the plantain, yuca, papaya, rascadera, sugar-cane, coconut, guabo, zapote, bread-fruit, orange, chonta dura, and palma real. Care was taken in arranging the table to see that there should be as much display as possible. The dried mammals and birds were in many cases placed in erect poses, and fruits or pieces of other foods were placed in the beaks of the birds and in the mouths or between the paws of the mammals. In one or two instances mammals were so posed as to appear as if fighting.

Directly after the service in the church, to which a small portion of the food was taken in order that by its presence during the service it might receive the blessing for all the food used in the feast, all the people of the village congregated at this particular house. The men and larger boys occupied the room in which the table was spread, and the women, girls, and small boys the room adjoining. The givers of the feast then presented to whomsoever they thought proper various articles from the table, such as a dried mammal, bird, or fish, and some fruit. These were for the recipients personally, and were to be taken home by them. On receiving such a gift, a man always took it personally or sent it to some of the women of his family in the adjoining room. This division of the food took a considerable part of what was

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upon the table; the rest was divided into small bits, and, after an invocation by the warden of the church, the men and boys, all seated on low benches about the table, proceeded to feast. The women meanwhile partook of a portion of the food that had been sent to the next room to them. Having finished the meal, a benediction was pronounced by the warden and the floor was cleared of all scraps of food and the leaves forming the table.

Immediately fresh leaves were spread as at first, and the boda, the word being here used in its more restricted sense, was served. While an ofrenda has a very elaborate assortment of foods, a boda has only fish, oysters, or meats cooked in ripe plantain in the form of a thick gruel. This is served always in the aboriginal pottery plates of the kind shown in pl. LXXXVII, 4, although for everyday use dishes of European manufacture have almost entirely supplanted the pottery plates formerly used. In this particular case the boda consisted of a single course of plantain and fish, but sometimes other courses are served in order. The feast having been finished, the majority of the people went to their respective abodes in the village or to the house of the chief.

At such gatherings offenders against the law are usually brought before the chief, by whom justice is dispensed and differences between individuals adjudicated. On this particular occasion several matters of this nature demanded the chief's attention. The details of these will show something of the methods of dispensing justice among the Cayapa.

Immediately after the boda on this first day the chief sent some officers to bring before him certain offenders

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796 ably due in part to the increased drunkenness, which was apparent throughout the day, but was due more largely to the greed of several negroes present.

264 796 After this feast the floor was cleared of remnants of the meal and of the leaves used to make the table. The second feast, the boda, was then served as usual. This consisted of three courses, each served on the same plate in the case of each individual, care being used in replenishing the supply that the plates of different individuals should not be interchanged. The three courses [162] of these mush-like foods consisted of plantain with fish, plantain with meat, and plantain with oysters. In case any individual did not eat any or all of his portion, it was taken to the next room by the host or by one of the attendants and given to one of the women of his family. The men giving the boda served the guests, while the women attended to filling the plates.

796 In this particular instance the whole of the previous night had been spent by the hostess and her friends in cooking and preparing the plantain mushes used in this boda. While hot they were poured into burden-baskets lined with leaves. When served they were cold and very thick.

796 Immediately following the feasts another refractory pair were brought to justice. In this case the man had forsaken his wife and for three months had been living with his first cousin, who had deserted her husband. Each of the culprits, therefore, was charged with the double crime of desertion of spouse and cohabitation with first cousin. These are considered great breaches of tribal law and are severely punished. As on the previous day,

Other wooden articles

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still made by the Cayapa include the /tǎči wimáso/ 'bark cloth beater,' /mačúka/ 'plantain masher,' and food stirrers of various types. A full listing and description can be had by consulting Barrett (Barrett 1925: 159-161). Elliptical wooden bowls called batea in Spanish, are cut from a single piece of wood, and they serve as trays for the preparation of some foods. [415]

Musical instruments, which are played by the men, include the marimba or /ma$^{1}$mba/, a large drum called by the Spanish word bombo, and a small free-standing drum that tapers at the base called conunu. The Negroes use the same instruments, but they also use various gourd rattles and bamboo shakers. Guitars are occasionally found among the Negroes but only seldom among the Cayapa. 534 [462] [171]

Pottery. This art is scarcely practiced anymore. In fact I was completely unaware that earthenware pots were in the household inventory at all until I was asked one day if I wished to purchase a small Cayapa-made one for five sucres (.30 U.S.). This was the only pot I ever saw, except for the large cantaras made by the people of the San Miguel section, for the storage of /wápo/, the fermented sugar-cane juice called guarapo in Spanish. 323 [178] [126] [273]

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pigs who find them especially delectable. The Cayapa seldom plant coconuts, but the Negroes do so whenever possible. Important palms are the Taqua and the Chontaduro. The taqua nut was formerly an extremely important economic product; its hard seed was in constant demand on the world market for the manufacture of shirt buttons. With the rapid development of the plastics industry some thirty years ago, the market for taqua seeds completely collapsed. The Cayapa still talk nostalgically of the days when money did apparently grow on trees. Though its export value has declined, the taqua palm, nevertheless, is still important to the internal economy: the leaves are used extensively for roof thatching, the nut is a minor item in the diet, and when the tree dies, the /múšu/, a delectable and very oily grub can be dug out of the trunk. Both men and women may work in the gardens. Generally speaking, however, the men clear the garden and the women plant the seeds or roots. Men and women may harvest the crops.

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The staff of life for the inhabitants of the Pacific Lowland Culture Area is the plantain which is found in many varieties. It may be eaten green or

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ripe, but most often it is boiled green and then pounded on a mortar. Bits of meat and/or fish may be added to the pulp. In this form it is called bala by both Negroes and Cayapa. In the ripe form, it may be boiled and treated as bala, or it may be eaten raw. Children eat enormous amounts of ripe plantain, and they never seem to become satiated. Important adjuncts to the subsistence pattern are the traveling merchants who bring canoe-loads of dried fish, clams, bread, cookies, sugar, and candy as well as smuggled Colombian cloth and clothing, up from the coast.

Hunting is a very important activity, and most Cayapa men spend one or two days a week tracking game. The main animals are large rodents called guanta /walámbu/, a smaller rodent called guatin /kúyu/, peccary /netúšu/, jaguar /kéla/, puma /l$^{y}$ukéla/, monkey /wášu/, squirrel /yámbu/, and the armadillo /čil$^{y}$ámbu/. Large birds are shot whenever possible and include toucans /čandútu/, the wild turkey /éle/, and a hawk /huyál$^{y}$u/. At the present time, hunting is done almost entirely with muzzle-loading shotguns. Hunting is generally a small operation involving no more than three